

AMENDMENTS TO THE CLAIMS

Please amend the Claims as follows. Insertions are shown underlined while deletions are ~~struck through~~.

1 (currently amended): A method for synthesizing absolute asymmetry which comprises:
providing a photochemically reversible reaction system in which ~~thea~~ starting material and ~~thea~~ product are each mixtures of enantiomers or diastereomers not photochemically or thermally converted into each other; and

irradiating the reaction system with right- or left-circularly polarized light to excite the starting material alone or both of the starting material and the product, thereby concentrating one of the enantiomers or diastereomers in the starting material and one of the enantiomers or diastereomers in the product that corresponds to the enantiomer or diastereomer not concentrated in the starting material.

2 (currently amended): The method according to claim 1 wherein the starting material and the product are mixtures of enantiomers and only the starting material is excited, the concentration of one of the enantiomers in the starting material and one of the enantiomers in the product being controlled by adjusting the anisotropic factor g which indicates the degree of selective excitation by the right- and left-circularly polarized light.

3 (currently amended): The method according to claim 1 wherein the starting material and the product are mixtures of enantiomers and both of the starting material and the product are excited, the concentration of one of the enantiomers in the starting material and one of the enantiomers in the product being controlled by adjusting at least one of the following:

the value of anisotropic factor g which indicates the degree of selective excitation by the right- and left-circularly polarized light;

plus or minus sign of g ; and

K indicating the photochemical equilibrium of the reaction.

4 (previously presented): The method according to claim 1 wherein the starting material is a norbornadiene derivative and the product is a quadricyclane derivative.

5 (new): A method for synthesizing absolute asymmetry which comprises:

providing a photochemically reversible reaction system in which a starting material and its isomerized product are each mixtures of enantiomers or diastereomers not photochemically or thermally converted into each other; and

increasing a concentration of one of the enantiomers or diastereomers in the starting material and simultaneously increasing a concentration of one of the enantiomers or diastereomers in the product that corresponds to the enantiomer or diastereomer not concentrated in the starting material, by irradiating the reaction system with right- or left-circularly polarized light to excite and isomerize the starting material alone or both of the starting material and the product.

6 (new): The method according to claim 5, wherein the starting material and the product are mixtures of enantiomers and only the starting material is excited and isomerized, and wherein the one of the enantiomers in the starting material and the one of the enantiomers in the product are concentrated as a function of the anisotropic factor g which indicates the degree of selective excitation by the right- and left-circularly polarized light.

7 (new): The method according to claim 5, wherein the starting material and the product are mixtures of enantiomers and both of the starting material and the product are excited and isomerized, and wherein the one of the enantiomers in the starting material and the one of the enantiomers in the product are concentrated as a function of at least one of the following:

the value of anisotropic factor g which indicates the degree of selective excitation by the right- and left-circularly polarized light;

plus or minus sign of g ; and

K indicating the photochemical equilibrium of the reaction.

8 (new): The method according to claim 5, wherein the starting material is a norbornadiene derivative and the product is a quadricyclane derivative.

9 (new): The method according to claim 5, wherein the starting material is a quadricyclane derivative and the product is a norbornadiene derivative.

10 (new): The method according to claim 8, wherein the right- and left-circularly polarized light has a frequency of 290 nm.

11 (new): The method according to claim 9, wherein the right- and left-circularly polarized light has a frequency of 245 nm.